

REMARKS

I. Status of the claims

After entering this amendment, claims 26-42, 51, 52, 54-58, 60-62, and 64-76 will be pending. Applicants amended claims 26, 27, 30-32, 35, 36, 54, 56, 58, 60, 61, 64, 65, and 67 in this response and cancelled claims 43-50, 53, 59, and 63 without prejudice or disclaimer. Claims 72 and 73 have been withdrawn for being directed to nonelected subject matter. Claim 26 was amended by incorporating the subject matter of claims 45, 46, 53, 59, and 63. Claims 54, 56, 60, 61, 64, and 67 have been amended to depend from claim 26. Claim 58 has been amended to be consistent with the amendments to claim 26. Claims 27 and 60 have been amended by adding the word "consisting" after the phrase "selected from the group." Claims 30-32, and 56 have been amended to more clearly define the invention in response to indefiniteness rejections, but their scope has not been narrowed. Claims 35, 36, 64, and 65 have been amended to reflect the fact that the compatibilizer is present in the composites of the invention. These amendments will be discussed in more detailed in the following sections. Support for these amendments appears in the original claims and throughout the specification and, therefore, there is no issue of new matter.

II. Restriction Requirement

The Office restricted examination to one of the following two groups under 35 U.S.C. § 1.121:

Group I. Claims 26-71 and 74-76; and

Group II. Claims 72 and 73.

Applicants affirm the provisional election, made with traverse, to prosecute the claims of Group I, claims 26-71 and 74-76.

In the Office Action of April 7, 2006, the Office indicated that the claims elected for examination were claims 1-35 and that claims 36-42 were withdrawn for being directed to nonelected matter. Office Action at p. 2. Applicants believe this designation was in error and that the claims currently under examination, corresponding to Group I of the Restriction Requirement, are claims 26-71 and 74-76. Similarly, the claims withdrawn are claims 72 and 73.

Applicants traverse the Restriction Requirement on the ground that the Office failed to show that the joint examination of the claims from Groups I and II would be a serious burden, other than to mention that the inventions are distinct. The Office's attention is respectfully directed to M.P.E.P. § 803, which sets forth criteria and guidelines for the Office to follow in making a proper requirement for restriction. The M.P.E.P. instructs the Office as follows:

If the search and examination of an entire application can be made without **serious** burden, the Office must examine it on the merits, **even though it includes claims to distinct or independent inventions.**

M.P.E.P. § 803 (emphasis added). A joint search of the subject matter of Groups I and II would not be burdensome because the claims of Group I contain subject matter whose proper search would overlap with the search of Group II. Accordingly, Applicants respectfully request that the claims of Groups I and II be examined together.

Rejoinder of claims

Furthermore, Applicants respectfully remind the Office that in view of relevant court findings, claims directed to processes of making or using a product are subject to rejoinder with claims drawn to that product once the product is found patentable.

M.P.E.P. §821.04(b)

The M.P.E.P. clearly states that “[i]n the event of rejoinder, the rejoined process claims will be fully examined for patentability.” M.P.E.P. §806.05(f). Moreover, “[i]n view of the rejoinder procedure, and in order to expedite prosecution, applicants are encouraged to present such process claims, preferably as dependent claims, in the application at an early stage of prosecution.” M.P.E.P. §821.04(b).

Therefore, in light of the rejoinder procedure applicable to the method of making claims of Group II, Applicants respectfully request that the Office examine all pending claims together in this application.

III. Information Disclosure Statement

The Office returned the PTO 1449 form Applicants filed on February 25, 2004. However, the Office did not return the PTO SB/08 form filed on July 14, 2005. Therefore, Applicants respectfully request that the Office initial and return this PTO SB/08 form to Applicants.

IV. Rejections under 35 U.S.C. § 112, first paragraph

The Office rejected claims 27, 30-32, 56-57, 60, and 75-76 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

The Office argues that in claims 27 and 60, the phrase “from the group” should be followed by the term “consisting of” for the claims to appropriately refer to the

Markush group. Applicants respectfully traverse. There is no fixed formulaic language to refer to a Markush group. Applicants respectfully remind the office that “[a]cceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification.” M.P.E.P. § 2173.05(b). The Office has failed to show why one of ordinary skill in the art would not understand the claim language in the rejected claims. However, with the purpose of expediting prosecution, Applicants have amended the claims as suggested by the Office. Accordingly, Applicants respectfully request that this rejection be withdrawn. This amendment does not change the scope of the claims.

The Office rejected claims 30-32 because of the use of the terms “and/or” and “respectively.” Applicants respectfully traverse. The alleged confusion present in these claims cited by the Office is an unlikely interpretation of the claims by one of ordinary skill in the art, particularly in light of the disclosure on page 5 of the specification, which clarifies the subject matter of these claims. However, with the purpose of expediting prosecution, Applicants have amended the claims by eliminating the terms “and/or” and “respectively.” Accordingly, Applicants respectfully request that this rejection be withdrawn.

The Office rejected claims 56 and 57 alleging that there is insufficient antecedent basis for the recitation “the first component of the outer layer” and “the second component of the outer layer”. Applicants have amended claim 56 to more clearly define the invention by indicating that the outer layer comprises at least two components. Support for this amendment is found in the specification on p. 7-8. Accordingly, Applicants respectfully request that this rejection be withdrawn.

The Office also rejected claims 75 and 76 under 35 U.S.C. §112, but failed to provide an explanation for the rejection under section 112. Comments regarding the rejection of claims 75 and 76 are present on page 8 of the Office Action, in the section for rejections under 35 U.S.C. §102. Because those comments appear to be directed to alleged indefiniteness of the claims, Applicants address the comments here.

The Office argues that the intended use of the thermoplastic multilayer composite is introduced in claims 75 and 76. According to the Office, the claims do not set forth any structure in the product and therefore “it is unclear what structure applicant is intending to encompass.” The Office cites M.P.E.P. § 2173.05(q) as support for the Office’s proposition that “the intended use in claims 75 and 76 [is] given little patentable weight.” Office Action at p. 8. Applicants respectfully traverse.

Foremost, the Office citation to M.P.E.P. § 2173.05(q) is inapposite because that section refers to “use” claims, which by definition are *process* claims, usually lacking recitation of *method steps*. See M.P.E.P. § 2173.05(q). Claims 75 and 76 are not process claims and are clearly not “use” claims within the context of § 2173.05(q). Moreover, contrary to the Office’s assertion, claims 75 and 76 do recite structure because they ultimately refer to the thermoplastic multilayer composite of claim 26, which explicitly recites adequate structural features. The subject matter of claims 75 and 76, moreover, is not a recitation of an intended use. Claim 75 distinguishes the tubing as being suitable in its structure to be used with liquid fuel, whether or not it is actually used in that way. Claim 76 recites that the composite is in a certain structural form. Because the Office has failed to show the source of indefiniteness in these claims, Applicants respectfully request that this rejection be withdrawn.

V. Rejections under 35 U.S.C. § 102

The Office rejected claims 26-71 and 74-76 under 35 U.S.C. 102(b) as allegedly being anticipated by U.S. Patent No. 6,555,243, issued to Flepp and Hoffmann (*"Flepp."*)

According to the Office, *Flepp* discloses a thermoplastic multilayer composite in the form of a hollow body with one intermediate layer formed on the basis of ethylene/vinyl alcohol copolymer. Office Action at p. 6. In the Office's view, *Flepp* discloses "at least one inner and outer layer...as [] adhesive layer[s] immediately adjacent to said intermediate layer." *Id.*, internal citations omitted. The Office further argues that "[s]aid inner and outer layers consist[] of a polyamide molding composition mixture of polyamide 6, polyamide 12, and a compatibilizer." *Id.* Applicants respectfully disagree with the Office's characterization of *Flepp*.

Foremost, *Flepp* does not disclose an inner and an outer layer immediately adjacent to an intermediate layer. Rather, *Flepp* discloses a "thermoplastic multilayer composite containing at least one intermediate layer...between layers made from molding compounds." *Flepp* at col. 5, lines 18-22. These layers "made from molding compounds" are called "neighboring" layers by *Flepp*. *Id.* at col. 22-26. *Flepp* teaches that at least one of these neighboring layers is "made from a molding compound on the basis of polyamide 12, polyamide 11, polyamide 1010, polyamide 1012, or polyamide 1212." *Id.*, emphasis added. These neighboring layers could act as an inner and an outer layer respectively, but *they are not both "immediately adjacent" to an intermediate layer*. Rather, there is an "adhesion-promoting layer" "between...at least one neighboring layer and the intermediate layer." *Id.* at col. 5, lines 26-28.

Moreover, contrary to the Office's assertion, neither the inner nor the outer layers in *Flepp* consist of a polyamide molding composition mixture of polyamide 6, polyamide 12, and a compatibilizer. The Office's citation in support of this statement clearly indicates that it is the adhesion-promoting layer that could comprise a mixture of polyamide 6, polyamide 12, and a compatibilizer. *Id.* at col. 5, lines 28-36. However, the adhesion-promoting layer is not an inner or an outer layer. As *Flepp* clearly explains, the adhesion-promoting layer is between the intermediate layer and a neighboring layer. *Id.* at col. 5, lines 26-36.

Applicants amended independent claim 26 to recite that the inner layer in the thermoplastic multilayer composite of the invention is located immediately adjacent to the intermediate layer, and that the intermediate layer is also located immediately adjacent to the outer layer. Additionally, claim 26 also recites that both the inner layer and the outer layer each comprise a mixture of different polyamide-homopolymers and a compatibilizer. In light of these amendments and the remarks regarding the disclosure in *Flepp* above, the present invention is not anticipated by *Flepp*. Accordingly, for at least these reasons, Applicants respectfully request that this rejection be withdrawn.

The present invention differs from the disclosure in *Flepp* in at least the following features:

- the inner layer comprises a mixture of different polyamide-homopolymers,
- the inner layer further comprises a compatibilizer,
- the intermediate layer is located immediately adjacent to the outer layer (there is no adhesion promoting layer),

- the outer layer comprises a mixture of different polyamide-homopolymers, and
- the outer layer further comprises a compatibilizer.

Flepp teaches a structure that has at least four layers. See, e.g., *Flepp* at col. 5, lines 18-36; col. 6, lines 1-12. Moreover, *Flepp* fails to teach or suggest the addition of a compatibilizer in a layer that is facing the exterior of the thermoplastic multilayer composite (both the inner layer as well as the outer layer). Indeed, the compatibilizer is only mentioned for the adhesion-promoting intermediate layers. *Flepp* at col. 5, lines 18-36. Accordingly, one of ordinary skill in the art, in light of the cited references, would not have considered the possibility of adding a compatibilizer to a layer that faces the exterior of the thermoplastic multilayer composite. Indeed, this would be equivalent to having the glue layer facing the outside of the thermoplastic multilayer composite.

Furthermore, *Flepp* also fails to teach or suggest that any one of the inner and outer layers comprise a mixture of different polyamide-homopolymers. Only pure single polyamide homopolymer layers are disclosed in *Flepp*. See, e.g., *Flepp* at col. 5, lines 18-36; col. 6, lines 1-12.

Moreover, there is no suggestion at all in *Flepp*, that it would be possible to reduce, let alone eliminate the adhesion promoting layer.

For all of the foregoing reasons, it is clear that *Flepp* does not anticipate the present invention and Applicants respectfully request that this rejection be withdrawn.

With respect to claims 47 and 49-50, the Office argues that *Flepp* “inherently teaches the additional intermediate layers with the use of copolyamide 6/12.” Office Action at p. 7. Applicants have cancelled claims 47 and 49-50 and therefore this

rejection is now moot and Applicants respectfully request that this rejection be withdrawn.

The specific rejection of claims 75 and 76 was already addressed in section IV above.

With respect to claims 30-32, the Office argues that “the applicant is introducing process limitations to the product claim, hence, the process claim is given little patentable weight due to the fact that the patentability of a product does not depend on its method of production” and that, therefore, “[c]laims 30-32 are examined only on the merits of the product.” Office Action at p. 8. In light of the comments above, the thermoplastic multilayer composite of claims 30-32, as claimed in claim 26, is patentable in light of the prior art and Applicants respectfully request that this rejection be withdrawn.

VI. Rejections under 35 U.S.C. § 103

The Office rejected claims 40 and 67 under 35 U.S.C. 103(a) as allegedly being unpatentable over *Flepp*. These claims were rejected alleging that the recitation of a compatibilizer in a proportion in the range of 5-35 parts in weight in the outer layer would have been obvious in light of *Flepp*'s disclosure that the compatibilizer is in the range of 0-30% weight. The Office argues that it would have been obvious to optimise the range of *Flepp* to arrive at the range in the instant invention. Applicants respectfully traverse.

As mentioned before, *Flepp* fails to teach or suggest the basic structure of the thermoplastic multilayer composite of claim 26. For example, *Flepp* fails to teach or suggest the use of a compatibilizer in the outer layer. Therefore, *Flepp* does not

suggest every limitation of the rejected claims, as a *prima facie* case of obviousness rejection requires. M.P.E.P. § 2143. For at least this reason, claims 40 and 67 are not obvious in light of *Flepp*. Accordingly, Applicants respectfully request that this rejection be withdrawn.

VII. Conclusion

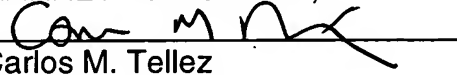
In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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